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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/761,304 | 01/22/2004 | Yasuhiko Shiomi | 1232-4633US1 | 3091 |

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| EXAMINER |
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COUSO, JOSE L

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| ART UNIT | PAPER NUMBER |
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2621

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,304

Applicant(s)

SHIOMI, YASUHIKO

Examiner

Jose L. Couso

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 17-22 is/are allowed.
6) ☒ Claim(s) 13-16 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/603,629.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Topper et al. (U.S. Patent No. 5,157,497).

In regard to claim 13, Topper describes a plurality of pixels arranged to sense an object (see figure 1, element 500 and refer for example to column 5, lines 20-32, the camera has "photo sensitive sensors 530" which correspond to applicant's plurality of pixels because a photosensitive sensor is composed of a plurality of picture sensing elements which are used to sense an object); and a switch arranged to switch, respectively, first horizontal and vertical linear correction data and second horizontal and vertical linear correction data in accordance with a position of a pixel of interest among the plurality of pixels (see figure 2, element 110 and refer for example to column 8, lines 44-60, the microprocessor acts as a switch by controlling the appropriate gain coefficient in the horizontal and vertical direction via adders at the timing corresponding to the image location of a particular pixel to be corrected); the first correction data being commonly used for correcting at least first and second pixels of the plurality of pixels, the second correction data being used for correcting a third pixel of the plurality of pixels (see figure 2 and refer for example to column 9, line 46 through column 11, line 39). Topper provides for a vertical correction first by using the vertical correction memory to commonly correct a plurality of pixels (element 40 in figure 2), these values correspond

to applicant's first correction data. By using the vertical correction memory Topper obtains the video correction values as shown in Table 2. The corrected values in this table include at least first and second pixels of the plurality of pixels, such as for example the pixels at location line 1, column 1 and location line 3, column 3. Topper then provides for a horizontal correction by using the horizontal correction memory to commonly correct a plurality of pixels (element 30 in figure 2), these values correspond to applicant's second correction data. By using the horizontal correction memory Topper obtains the video correction values as shown in Table 4. The corrected values in this table include a third pixel of the plurality of pixels, such as for example the pixel at location line 5, column 5.

With regard to claim 14, Topper describes a switch arranged to switch, respectively, first horizontal and vertical linear correction data and second horizontal and vertical linear correction data in accordance with a position of a pixel of interest among the plurality of pixels (see figure 2, element 110 and refer for example to column 8, lines 44-60, the microprocessor acts as a switch by controlling the appropriate gain coefficient in the horizontal and vertical direction via adders at the timing corresponding to the image location of a particular pixel to be corrected); the first correction data being commonly used for correcting at least first and second pixels of the plurality of pixels the second correction data being used for correcting a third pixel of the plurality of pixels (see figure 2 and refer for example to column 9, line 46 through column 11, line 39). Topper provides for a vertical correction first by using the vertical correction memory to commonly correct a plurality of pixels (element 40 in figure 2), these values correspond

to applicant's first correction data. By using the vertical correction memory Topper obtains the video correction values as shown in Table 2. The corrected values in this table include at least first and second pixels of the plurality of pixels, such as for example the pixels at location line 1, column 1 and location line 3, column 3. Topper then provides for a horizontal correction by using the horizontal correction memory to commonly correct a plurality of pixels (element 30 in figure 2), these values correspond to applicant's second correction data. By using the horizontal correction memory Topper obtains the video correction values as shown in Table 4. The corrected values in this table include a third pixel of the plurality of pixels, such as for example the pixel at location line 5, column 5.

As to claim 15, Topper describes respectively switching first horizontal and vertical linear correction data and second horizontal and vertical linear correction data in accordance with a position of a pixel at interest among the plurality of pixels (see figure 2, element 110 and refer for example to column 8, lines 44-60, the microprocessor acts as a switch by controlling the appropriate gain coefficient in the horizontal and vertical direction via adders at the timing corresponding to the image location of a particular pixel to be corrected); the first correction data being commonly used for correcting at least first and second pixels of the plurality of pixels, the second correction data being used for correcting a third pixel of the plurality of pixels see figure 2 and refer for example to column 9, line 46 through column 11, line 39). Topper provides for a vertical correction first by using the vertical correction memory to commonly correct a plurality of pixels (element 40 in figure 2), these values correspond to applicant's first correction

data. By using the vertical correction memory Topper obtains the video correction values as shown in Table 2. The corrected values in this table include at least first and second pixels of the plurality of pixels, such as for example the pixels at location line 1, column 1 and location line 3, column 3. Topper then provides for a horizontal correction by using the horizontal correction memory to commonly correct a plurality of pixels (element 30 in figure 2), these values correspond to applicant's second correction data. By using the horizontal correction memory Topper obtains the video correction values as shown in Table 4. The corrected values in this table include a third pixel of the plurality of pixels, such as for example the pixel at location line 5, column 5.

In regard to claim 16, Topper describes respectively switching for first horizontal and vertical linear correction data and second horizontal and vertical linear correction data in accordance with a position of a pixel of interest among the plurality of pixels (see figure 2, element 110 and refer for example to column 8, lines 44-60, the microprocessor acts as a switch by controlling the appropriate gain coefficient in the horizontal and vertical direction via adders at the timing corresponding to the image location of a particular pixel to be corrected); the first correction data being commonly used for correcting at least first and second pixels of the plurality of pixels, the second correction data being used for correcting a third pixel of the plurality of pixels see figure 2 and refer for example to column 9, line 46 through column 11, line 39). Topper provides for a vertical correction first by using the vertical correction memory to commonly correct a plurality of pixels (element 40 in figure 2), these values correspond to applicant's first correction data. By using the vertical correction memory Topper obtains

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the video correction values as shown in Table 2. The corrected values in this table include at least first and second pixels of the plurality of pixels, such as for example the pixels at location line 1, column 1 and location line 3, column 3. Topper then provides for a horizontal correction by using the horizontal correction memory to commonly correct a plurality of pixels (element 30 in figure 2), these values correspond to applicant's second correction data. By using the horizontal correction memory Topper obtains the video correction values as shown in Table 4. The corrected values in this table include a third pixel of the plurality of pixels, such as for example the pixel at location line 5, column 5.

3. Claims 17-22 are allowed.

4. The following is an examiner's statement of reasons for allowance: The prior art of the record fail to teach or suggest singly and/or in combination an image processing method and apparatus which provides for using storing horizontal linear correction data and vertical linear correction data for correcting an image sensed by an image sensing element as prescribed for in the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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5. Applicant's arguments filed February 28, 2005 have been fully considered but they are not persuasive.

The examiner has thoroughly reviewed applicant's arguments on page 7 but firmly believes the cited Topper reference to reasonably and properly meet the claimed limitations as set forth in the broader claims 13-16.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jose L. Couso whose telephone number is (703) 305-4774. The examiner can normally be reached on Monday through Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau, can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8576.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jlc
May 2, 2005


JOSE L. COUSO
PRIMARY EXAMINER